UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,765	04/02/2004	Chiaki Hamada	119332	9946

25944 7590 07/10/2008

OLIFF & BERRIDGE, PLC
P.O. BOX 320850
ALEXANDRIA, VA 22320-4850

EXAMINER	
MANCHO, RONNIE M	
ART UNIT	PAPER NUMBER
3664	

NOTIFICATION DATE	DELIVERY MODE
07/10/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Office Action Summary	Application No.	Applicant(s)	
	10/815,765	HAMADA ET AL.	
	Examiner	Art Unit	
	RONNIE MANCHO	3664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 March 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/11/07*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Watanabe (2002/0185913).

Regarding claim 1, Watanabe (abstract, sec 0008, 0009, 0019-0021, 0062, 0068, 0075; figs. 1-5) disclose a device for controlling braking of a vehicle, the vehicle having front and rear wheels, the device comprising:

a braking system ((figs. 1A&B) generating braking forces on the respective wheels (abstract, sec 0008, 0009, 0019-0021; figs. 1-5);

at least one sensor 96 (fig. 1B) monitoring an operational condition of the vehicle including a detector detecting an amount of a braking action by a driver of the vehicle (abstract, sec 0008, 0009, 0019-0021; figs. 1-5); and

a controller 92 (fig. 1B) that is configured to execute an anti-skid control (ABS (sec. 0062) and that is configured to execute a braking force distribution control in which braking force on the front wheels is increased in comparison with braking force on the rear wheels (abstract, sec 0008, 0009, 0019-0021; figs. 1-5) when an operational

condition monitored by a sensor among the at least one sensor satisfies a predetermined condition, wherein:

braking force on the front wheels during execution of the braking force distribution control is increased (abstract, sec 0008, 0009, 0019-0021; figs. 1-5), and wherein a braking force increment on the front wheel is determined based upon an increment of the braking action by the driver detected by the detector (abstract, sec 0008, 0009, 0019-0021; figs. 1-5); however,

when execution of the antiskid control for either of the front wheels is started (sec. 0062, 0068, 0075; figs.4-5), during the braking distribution control, the braking force increment on the front wheels is decreased during the braking distribution control (sec. 0062, 0068, 0075; figs.4-5).

Regarding claim 2, Watanabe (abstract, sec 0008, 0009, 0019-0021, 0062, 0068, 0075; figs. 1-5) disclose the device of claim 1, characterized in that braking force on the rear wheels is increased when the anti-skid control is executed.

Regarding claim 3, Watanabe (abstract, sec 0008, 0009, 0019-0021, 0062, 0068, 0075; figs. 1-5) disclose the device of claim 1, characterized in that the braking force increment on the front wheel is decreased until the increment reaches to zero.

Regarding claim 4, Watanabe (abstract, sec 0008, 0009, 0019-0021, 0062, 0068, 0075; figs. 1-5) disclose the device of claim 1, characterized in that the decreasing of the braking force increment on the front wheel is interrupted if the anti-skid control is terminated but the increment does not reach to zero.

Regarding claim 5, Watanabe (abstract, sec 0008, 0009, 0019-0021, 0062, 0068, 0075; figs. 1-5) disclose the device of claim 1, wherein the braking system comprises a

hydraulic circuit connected with a master cylinder and braking force generating apparatus including wheel cylinders provided for the respective wheels; and the braking action is reflected in a pressure in the master cylinder, characterized in that the decreasing of the braking force increment is executed by decreasing braking pressures in the front wheel cylinders.

Regarding claim 6, Watanabe (abstract, sec 0008, 0009, 0019-0021, 0062, 0068, 0075; figs. 1-5) disclose the device of claim 2, wherein the hydraulic circuit comprises a hydraulic circuit connected with a master cylinder and braking force generating apparatus including wheel cylinders provided for the respective wheels; the braking action is reflected in a pressure in the master cylinder; and valves selectively allowing fluid communication between the master cylinder and the rear wheel cylinders, characterized in that the increasing of the rear wheel braking force is executed by opening the valves.

Regarding claim 7, Watanabe (abstract, sec 0008, 0009, 0019-0021, 0062, 0068, 0075; figs. 1-5) disclose the device of claim 5, wherein the hydraulic circuit comprises at least a common line supplying at least one of the front wheel cylinders and at least one of the rear wheel cylinders, and at least a pressure regulating valve in the common line regulating a pressure in the common line and selectively fluidly connecting the common line to master cylinder.

Regarding claim 8, Watanabe (abstract, sec 0008, 0009, 0019-0021, 0062, 0068, 0075; figs. 1-5) disclose the device of claim 7, wherein the hydraulic circuit is of cross dual circuit type (sec. 0021).

Regarding claim 9, Watanabe (abstract, sec 0008, 0009, 0019-0021, 0062, 0068, 0075; figs. 1-5) disclose the device of claim 7, wherein the hydraulic circuit is of front-rear dual circuit type.

Regarding claim 10, Watanabe (abstract, sec 0008, 0009, 0019-0021, 0062, 0068, 0075; figs. 1-5) disclose the device of claim 7, wherein the hydraulic circuit comprises valves selectively allowing fluid communication between the common line and the rear wheel cylinders, characterized in that the increasing of the rear wheel braking force is executed by opening the valves.

Regarding claim 11, Watanabe (abstract, sec 0008, 0009, 0019-0021, 0062, 0068, 0075; figs. 1-5) disclose the device of claim 6, wherein the opening of the valves is executed intermittently.

Regarding claim 12, Watanabe (abstract, sec 0008, 0009, 0019-0021, 0062, 0068, 0075; figs. 1-5) disclose a device for controlling braking of a vehicle having front and rear wheels, comprising:

a braking system (figs. 1A&B) generating braking forces on the respective wheels (abstract, sec 0008, 0009, 0019-0021; figs. 1-5);

at least one sensor 19 (fig. 1B) monitoring an operational condition of the vehicle including a detector detecting an amount of a braking action by a driver of the vehicle (abstract, sec 0008, 0009, 0019-0021; figs. 1-5); and

a controller 92 (fig. 1B) that is configured to execute an anti-skid control (ABS (sec. 0062) and that is configured to execute a braking force distribution control in which braking force on the front wheels is increased in comparison with braking force on the rear wheels (abstract, sec 0008, 0009, 0019-0021; figs. 1-5) when an operational

condition monitored by a sensor among the at least one sensor satisfies a predetermined condition, wherein:

braking force on the front wheels is increased (abstract, sec 0008, 0009, 0019-0021; figs. 1-5) during execution of the braking force distribution control, but decreased during execution of the braking force distribution control when execution of the antiskid control for either of the front wheels is started during the braking force distribution control (0062, 0068, 0075; figs. 4-5).

Regarding claim 13, Watanabe (abstract, sec 0008, 0009, 0019-0021, 0062, 0068, 0075; figs. 1-5) disclose the device of claim 12, wherein a rate of decreasing the front wheel braking force when an operational condition monitored by a sensor among the at least one sensor satisfies a predetermined condition for terminating the braking force distribution control is faster than a rate of decreasing the front wheel braking force when anti-skid control for either of the wheels is executed.

Regarding claim 14, Watanabe (abstract, sec 0008, 0009, 0019-0021, 0062, 0068, 0075; figs. 1-5) disclose the device of claim 12, wherein the braking force on the front wheel is decreased until the braking force reaches to braking force requested by the braking action by the driver.

Regarding claim 15, Watanabe (abstract, sec 0008, 0009, 0019-0021, 0062, 0068, 0075; figs. 1-5) disclose the device of claim 12, wherein the increase of the braking force on the rear wheels is restricted during execution of the braking force distribution control but allowed when anti-skid control for either of the wheels is executed or when an operational condition monitored by a sensor among the at least one sensor satisfies a predetermined condition for terminating the braking force distribution control.

Response to Arguments

3. Applicant's arguments filed 3/28/08 have been fully considered but they are not all persuasive.

The 112 rejections and the MPEP 2114/2115 rejections have been vacated in view of applicant's amendments.

Applicant traverses the 102 rejections in view of Watanabe. The examiner disagrees. Applicant ignores all the sections cited in the prior art and further misinterprets the prior art. Applicant argues that the prior art fails to provide executing or starting an antiskid control during braking force distribution control. Applicant again admits that sec. 0075 determines if anti-skid is being performed. Applicant's arguments therefore appear to be contradictory. Applicant further argues that in the prior art braking force distribution is allowed on the one hand and on the other hand braking force distribution control is not allowed. The examiner does not understand the basis of the argument as "allowed or not allowed" is not claimed. However, the examiner notes that the cited sections above read on the claims. Applicant failed to address all the sections cited by the examiner in the rejection.

Applicant further argues in an interview, the examiner indicated that step 33 and step 34 of the prior art as being executed at the same time. This is not correct because S33 is executed first before S 34 is executed. However, the argument is not on point since the claims do not call for step 33 and step 34 of the prior art. Further applicant does not provide a date of the interview or any record of the interview.

Applicant further argues that anti-skid control in the prior art is started before (and not during) the braking distribution control. The examiner disagrees and asks applicant to show where the prior art discloses that "anti-skid control in the prior art ***is started before (and not during)*** the braking distribution control", emphasis added. The examiner further notes that anti-skid control is also braking force distribution control. Applicant has not shown that they are different.

It is believed that the prior art anticipates the claims. The rejection thus stands.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Communication

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to RONNIE MANCHO whose telephone number is (571)272-6984. The examiner can normally be reached on Mon-Thurs: 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Khoi can be reached on 571-272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ronnie Mancho
Examiner
Art Unit 3664

7/3/2008
/Khoi H Tran/
Supervisory Patent Examiner, Art Unit 3664